## A fantasy by C H Andrewes

I am asked by the editor of this journal to do an article for its {
Coronation number. He is also asking a lot of other old Barts's men to do artices, but the others are all extremely high toned characters like dukes, and even surgeons. Now I am not in this class at all, being only a slightly prominent back-room boy, and the way I figure it is he wants me to write something very learned and obscure so that he can crack up his journal as being high-browed as well as high-toned.

The other day I am forgetting all about this request and I am reading a thing in the current Journal of General Microbiology by Doc Hayes entitled "Observations on a transmissible agent determining sexual differentiation in Bacterium coli". This guy says that an infectious agent like a bacteriophage infects simple minded B. coli and endows them with sexual appetites and potency. Now this guy Hayes is an Irishman, so you might figure it was all a leg pull, but in the same journal is an article by an Italian and two Americans, called Cavalli, Lederberg and Lederberg and they pitch the same yarn. And since Italians and U.S. citizens are agreed by one and all to be very reputable characters indeed, I suppose this is all right. However, the articles in question make fairly heavy going, even though I am extremely interested in the question: "Is sex infectious?", and I am presently reaching out for something lighter to read and I find a story by a guy called Damon Runyon. This is all about Broadway and guys and dolls and rods and snatching and scratching and this and that and one thing and another. But after a while I get too sleepy to read even this, so I dose off and the dreams I dream seem to have Damon Runyon and the J. Gen. Microb. a bit mixed together.

Once upon a time (my dream goes) ever so long ago there is an Autotrophic Micro-organism called Plato the Pure living in a primeval slime. And since he only propagates by binary fission, all his progeny of the same clone (or clan as the Scots say) carry the same name. He profigates by binary fission because he is taught to do so, and all his thoughts are pure and the idea of kissing a doll bang on the mash never enters his noggin, partly because he has no noggin and there are no dolls, though there are plenty of dark nights, at that, and all being wasted. Now Plato is very happy wrapping himself around the prime val slime whenever hungry, except for some very unpleasant guys called bacteriophages. These are very unpleasant characters indeed who do not honestly scratch for themselves, but shoot their way through an autotrophic micro-organisms cell wall and make merry hell in the cytoplasmic contents thereof and finally bust it all up completely. How Plato the Pure and his friends finally devise means to thwart these bacteriophages either by bulletoroofing their outer walls or by learning how to take away a phage's rod when he gets inside, so as to denote him to a pro-phage. Pro-phages can be tolerated as long as they keep out of the way and you don't trip over their tails when engaged in the ticklish business of binary fission. Still, not even the most harmless of phases are really welcomed.

One day a particularly masty phage called Percy the Pimp gets together with his friends and concocts a plan to make themselves acceptable to the bacterial cell. This involves disguising themselves in genes.

I guess I have to explain what genes are. When an organism like Plato the Pure wishes to binary fiss, he sorts out his component parts into pairs (called pairs of genes), so that each half will have a complete set; and all

<sup>\*</sup> J. Gen. Microh. 1953 vol. 8, p. 72, in case you don't believe me.

bacteria take great pride in their genes. When a phage decks out his nether limbs in a pair of genes, especially blue genes, he looks more than somewhat attractive and any bacterium so Percy the pimp reckons, will be glad to have him inside his cellular wall. And so it happens and Percy the Pimp's plan is all the rage with one and all. For when Plato the Pure finds a strange gene inside him he feels most peculiar and gets all excited because it really is a most agreable feeling indeed.

After a bit he and his friends begin to think, why bother about Percy the Pimp. Every so often a bacterium hauls off and dies and after it autolyses, odd genes are left lying untidily about in the primordial ooze. So Platostarts quickly snatching these odd genes when no-one is looking and he gets just as big a kick as when Percy introduces them, bringing his own unwelcome company through the cell wall at the same time. Later on, Plato and a blond bacillus get to giving each other birthday presents of genes they don't especially need for themselves. And pretty soon Plato the Pure doesn't do a lot to deserve his epithet and people begin calling him plain Plato. But this gene swapping racket turns out most excellently for one and all, for quite apart from getting kicks out of it, it gives bacterial evolution one whale of a boost and the humblest micro-organisms get going places and turning into protozoa and higher fungi and one thing and another.

Finally, a big moment comes, when two of them are close together in a corner, swapping genes, when, lo, there is a solution of the continuity of their adjacent cell walls, and what happens next I can't tell because of the Lord Chamberlein. What's more, other germs soon get the same idea. Such things can't take place without comment and remark and before long a watch committee is formed of 2 matrons, 3 bishops, 4 borough councillors and a night sister and they begin plugging the slogan "Back to binary fission!" They have some ideas of stopping the whole thing with antibiotics, but of course that cuts no ice: sex is here to stay.

The watch committee does, however, get the thing regulated. There happens about that time to be a craze for American square dancing and people are rather easily persuaded that when they want to exchange genes they shall organize in a sort of ritual dance. The Virginia reel is favoured at first, but soon a very pretty dance is invented. It goes to a song with the refrain "Don't tread on my toeses" and the dance gets the name Mitosis and one and all are dancing it ever since. And so it goes on and on. The ritual gets a good deal more complicated in the last thousand years, and now one is supposed to have things like parsons and rings, and even champagne and bridesmaids. Many people enjoy this; but no one thinks of outting up a statue to Percy the Pimp who starts it all.

I tell of this dream because it contains a lot of valuable information which may be of use to students taking examinations: it may help them to pass and become doctors or highly prominent back-room boys or dukes or even surgeons.